CalPERS Private Equity (PE) **Annual Program Review** December 2013



Outline

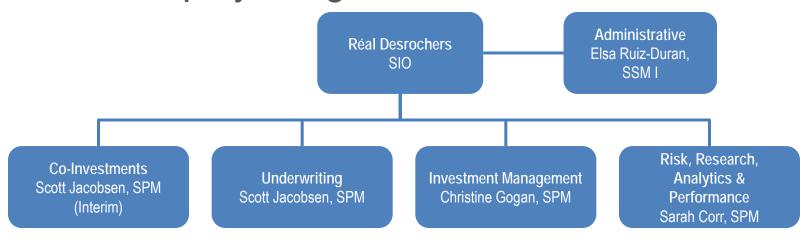
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I. Private Equity Overview



Private Equity Program Overview



- Private Equity (PE) 1-year net Internal Rate of Return (IRR) is 19%, 3-year was 15.9%, 5-year was 7.7%, and 10-year was 12.9%
- PE has committed \$7.4B since the Strategic Plan was implemented in September 2011
 - \$4.7B to Funds
 - \$600M to Co-investments
 - \$2.1B to Customized Investment Accounts
- Major accomplishments:
 - Insourced critical functions previously outsourced to external advisors
 - Restructured PE Business Model



II. Investment Review



Program Role

Global Equity

2/3 FTSE US + 1/3
FTSE ROW*

300bps

Private equity allocations are a means of enhancing equity returns through a valueadded approach to investment management of a diverse set of portfolio companies and to capture the illiquidity premium. The major driver for returns is appreciation, with negligible cash yield.

- ALM Workshop 2013

*(67% FTSE U.S. TMI + 33% FTSE AW ex U.S. TMI) +3% lagged one quarter



Investment Beliefs

- I. Liabilities must influence the asset structure
- II. A long time investment horizon is a responsibility and an advantage
- III. CalPERS investment decisions may reflect wider stakeholder views, provided they are consistent with its fiduciary duty to members and beneficiaries
- IV. Long-term value creation requires effective management of three forms of capital: financial, physical and human
- V. CalPERS must articulate its investment goals and performance measures and ensure clear accountability for their execution
- VI. Strategic asset allocation is the dominant determinate of portfolio risk and return
- VII. CalPERS will take risk only where we have a strong belief we will be rewarded for it
- VIII. Costs matter and need to be effectively managed
- IX. Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error
- X. Strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives



Strategic Plan: September 2011

Sept 2011 Dec 2013 June 2016

Item	Progress
Review current PE Investment Policy	✓
Review target allocation for PE	✓
Assign target and ranges for each portfolio strategy	✓
 Identify ways to rebalance and restructure the portfolio 	✓
Review the investment and monitoring process	✓
Review the existing operating model	✓
Present Action Plan	✓



Strategic Plan continued...

FROM	ТО	PROGRESS
28 Personnel Years (PYs)	52 PYs	✓
External Advisor Driven Model	Insourced Monitoring and Due Diligence Functions Savings of approximately \$3.3M of recurring annual expenses on External Advisors	✓
762 Funds with 398 Managers	Focused portfolio built around core set of high performing managers	741 Funds with 389 Managers
No Dedicated Research or Risk Unit	Functional Risk and Research Group	✓
No Formalized Investment Review Process	Functional Investment Review Committee	✓
Multiple Unreliable Data Sources and Inconsistent Reporting From Several Sources	Selected Service Providers and initiated implementation of the Portfolio Management Solution	Private Equity Accounting and Reporting Solution (PEARS) implementation underway
Full Fee and Carry on All Investments	Reduced Economics Saves Approximately \$90M - \$250M	✓
Passive Management of Stock Distributions	Stock Distributions Actively Managed	✓



Statements of Investment Policy Review

Staff has reviewed the Statements of Investment Policy for the Program and has found that currently:

- No changes are needed
- All policies are still applicable

PE will continue to review all policies for any necessary changes in the future.



Portfolio by Investment Structure

(\$ in billions)

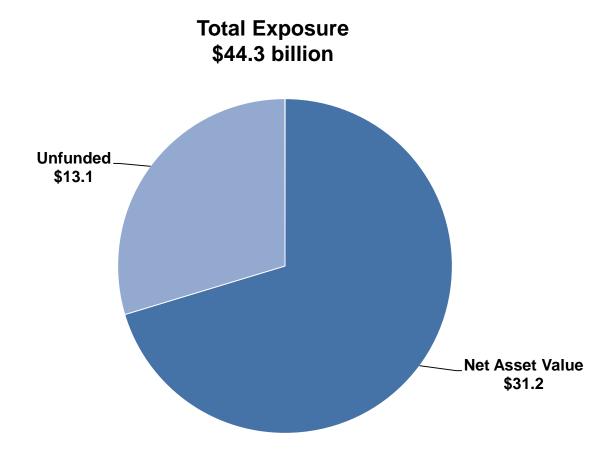
Structure	Capital Committed Since Inception (1990)	Capital Contributed	Net Asset Value	Net IRR	Investment Multiple
Co-Investment/Direct	\$2.7	\$2.7	\$0.9	12.8%	1.45x
FOF/Vehicles	\$7.9	\$6.4	\$3.7	4.1%	1.18x
Funds*	\$60.7	\$48.1	\$27.3	11.4%	1.46x
Secondaries	\$1.3	\$1.2	\$0.4	14.8%	1.41x
Total	\$72.7	\$58.4	\$32.3	10.7%	1.43x

Fund of Fund Initiatives are highlighted on page 22.

*Includes Customized Investment Accounts As of June 30, 2013



Total Exposure

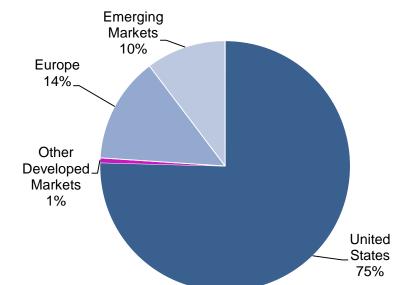


As of September 30, 2013; \$'s in billions

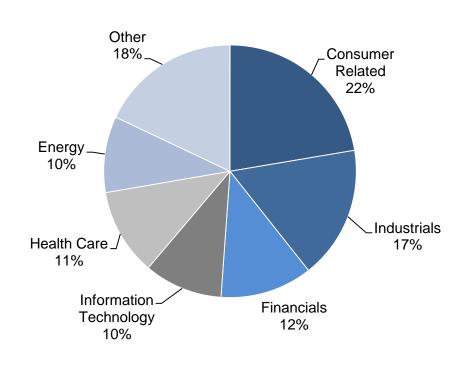


Exposure by Geography and Industry

Portfolio by Geographic Mandate



Portfolio by Industry





Performance by Strategy

(\$ in billions)

Strategy	Net Asset Value	Policy Target %
Buyout	\$19.0	60
Credit Related	\$4.5	15
Growth Expansion	\$5.3	15
Opportunistic	\$0.7	10
Venture Capital	\$1.7	1
Grand Total	\$31.2	_

1-Year Return %	3-Year Return %	5-Year Return %	10-Year Return %
17.4	15.7	7.6	17.2
27.4	21.5	14.3	15.2
24.9	15.9	3.8	8.6
4.1	11.6	1.2	5.9
3.7	6.2	1.3	4.3
19.0	15.9	7.7	12.9

- Portfolio is in compliance with policy targets
- Buyout and Credit Related are driving performance of the Portfolio over the longterm

As of September 30, 2013



Since Inception Performance Realized and Unrealized

(\$ in billions)

Status	Total Gain (Loss)	Net Asset Value	Net IRR %	Inv Mulitple
Realized Investments	\$4.6	\$0.0	11.6	1.4x
Unrealized Investments	\$20.6	\$32.3	10.4	1.4x
Total Portfolio	\$25.1	\$32.3	10.7	1.4x

 Over long periods of time, the realized investments generate a higher return than unrealized (marked-to-market value).

As of June 30, 2013



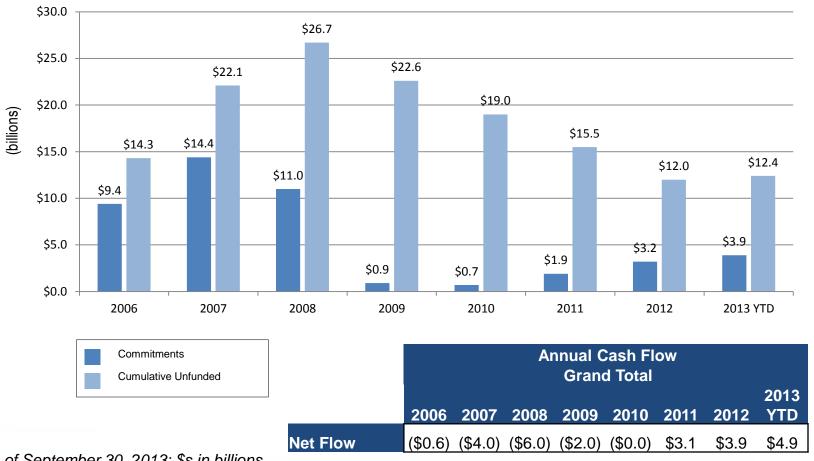
Investment Activity Since Strategic Plan Implementation: September 2011 - Present

(\$ in billions)	FY 2011-12	FY 2012-13	July though Nov. 2013
Investment Strategy Group Allocation	\$3.6	\$5.0	\$6.0
Commitments	\$1.7	\$3.7	\$2.0
Funds	\$0.5	\$3.0	\$1.1
Co-Investments	\$0.1	\$0.2	\$0.3
CIA*	\$1.0	\$0.5	\$0.6
Investment Proposal Tracking System (IPTS) Submissions	286	220	54
% of IPTS Submissions Resulting in an investment	3%	6%	7%

^{*}Customized Investment Account



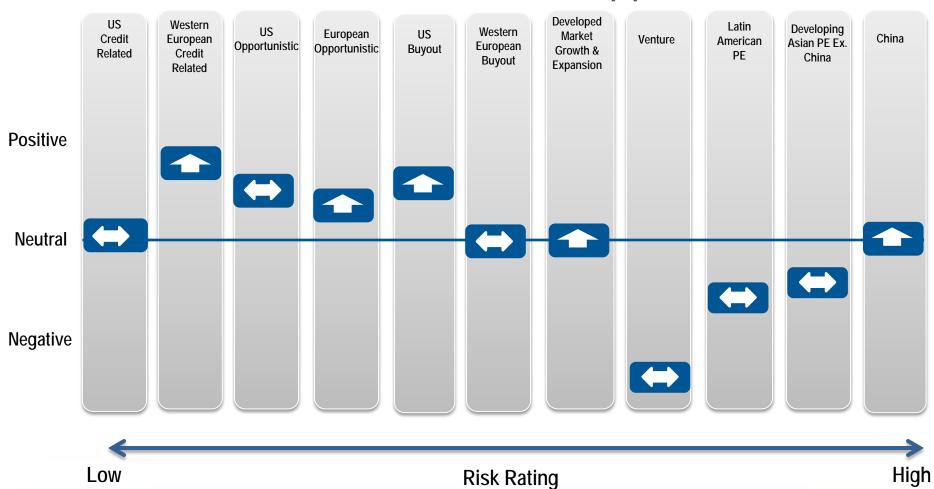
Commitments and Cumulative Unfunded by Year



As of September 30, 2013; \$s in billions

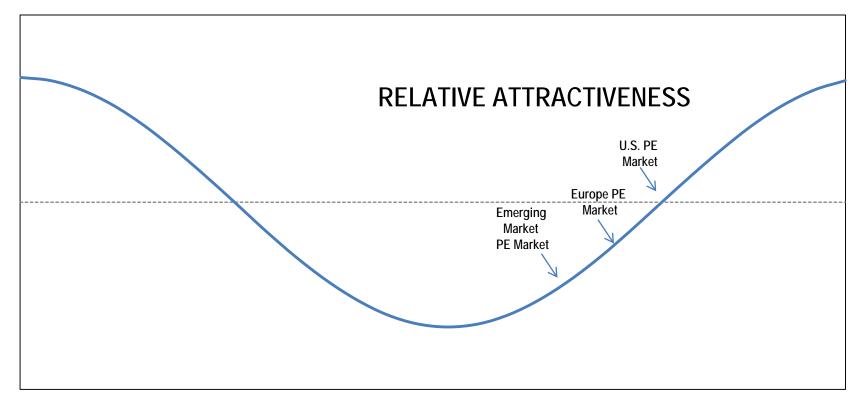


House View on Relative Value Opportunities





Private Equity Market Cycle



Note: Staff estimate of cycle



PE Investment Environment

Positives Challenges U.S. remains relatively attractive U.S. fundraising for 2013 is on track to approach the approximately \$300B from the record years Credit environment continues to be positive 2007 and 2008 Only second time since 2004 that average Increase in sponsor to sponsor transactions in multiple is below 8.0x Europe In general, the LPs receive 100% of transaction Average U.S. LBO multiples are 7.8x versus fees Europe average multiples of 9.1x for 1H 2013 Average hold period for private equity investments is at a record level of 5.4 years Venture Capital continues to be challenging for large institutional investors

 Manager selection is critical to success given the greater dispersion of returns relative to other asset classes

Source: Pregin and S&P LCD



Portfolio Risks

- Significant amount of investment value concentrated in vintage years 2006-2008, representing 75% of overall Net Asset Value
- Portfolio is over diversified creating challenges to generate returns above the median
- Large commitments to Fund of Funds (12% of portfolio) are a drag on the portfolio
- Low commitment levels in 2009-2011 likely to impact the ability of the portfolio to achieve the target allocation in future years



Highlighted Initiative:

Fund of Funds Review Project

- 12% of the Portfolio in Fund of Funds with limited control and higher costs
- Extensive review of the unfunded commitments and options for maximizing value in the Fund of Funds is underway
- Identifying potential graduates from Fund of Funds
- Since inception to date Net IRR 4.1% (as of June 30, 2013)



Highlighted Initiative:

Emerging Manager Update

- Three new commitments have been made to emerging managers in 2013
- Private Equity and Targeted Investment Programs (TIP) staff are working on the Private Equity Emerging Manager Program Review to adopt best practices in manager selection and in formulating the next iteration of Private Equity's approach to investments with emerging managers
- Staff will report the results of the Review at the March 2014 Investment
 Committee meeting



Highlighted Initiative:

California Investment Strategy

- Proactive California Co-investment Strategy
- Explore the Clean Technology Initiative for promising investments
 - Triage the existing clean technology portfolio for companies that are or likely to be successful
- California Mezzanine Lending Strategy
 - Work with partners experienced in mezzanine lending to target attractive California firms
- PE is collaborating with the Targeted Investment Programs (TIP) to finalize the CA Investments Strategy



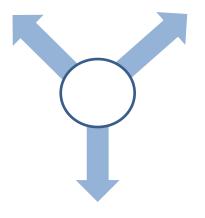
III. Business Review



Business Model

Fund investments and Customized Investment Accounts

- Top-performing funds with strong track records and high growth potential
- Provide exposure to attractive geographies and sectors
- Provide opportunities for co-investments



Co-Investments alongside Fund Partners

- High quality GPs
- Strong industry fundamentals
- Attractive business and valuation
- Favorable deal dynamics

Secondary Sales and Purchases

- Utilize secondary sales to restructure and rebalance portfolio
- Evaluate secondary purchases of underexposed vintage years



Staffing

Total of 52 positions within Private Equity

Hired 4 Portfolio Managers, 11 Investment Officers, 2 Support Staff in 2013 YTD

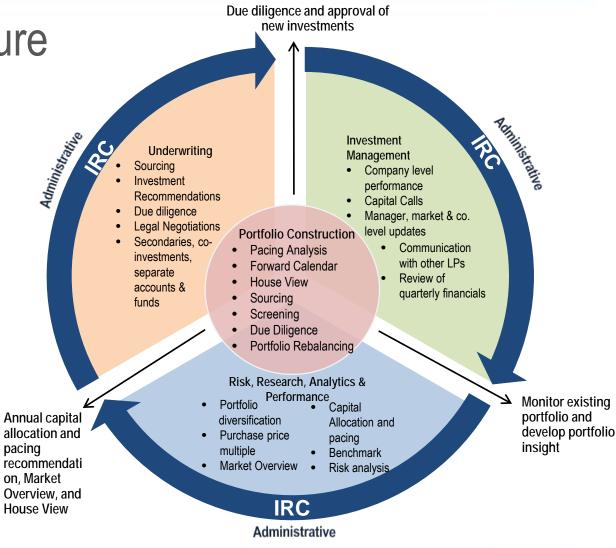
Current Vacancies: 1 Senior Portfolio Manager, 4 Investment Officers, 2 Analysts, and 4 Support Staff



Program Structure

Investment Review Committee (IRC)

- <u>Purpose:</u> Consistent review of investments that have passed the Manager Assessment Tool (MAT).
- <u>Timing:</u> Weekly
- Attendees:
 - CIO, SIO, SPMs,
 PMs, 2 PMs from
 other Asset Classes,
 ICOR PM, and Board
 Consultant





Private Equity Accounting and Reporting Solution (PEARS)

Current State Future State Multiple investment accounting systems and worksheets Robust, end-to-end, single system for both Accounting and Investment Book of Records Complex reconciliation process Significant manual processes within PE Increased data oversight by Investment Accounting staff New deals Full daily reconciliations. Improved reconciliations Capital Call & Distribution Processing processes for: Portfolio Management / Monitoring Cash flows and detailed transactions with Managers Risk Management / Compliance Cash and non-cash transactions with Custodian Manager data is delivered in different formats, methods, Capital calls, unfunded, total commitment, and position latency, and levels of completeness reconciliations with PE Portfolio Management Solution Limited detailed data is available on portfolio Detailed reporting for financial and investment analysis companies, transactions, and funds Increased transparency in cash transactions to better understand fees and expenses, performance of Large effort to normalize and interpret data to be used for meaningful analysis underlying companies, and security-level data Limited methods to track quality of data and maintain Increased efficiency through improved business processes and automated workflows Manager Service Levels Reduce the proliferation and fragmentation of data in multiple spreadsheets Provide enhanced analytical capabilities enabling better monitoring and control



Private Equity Accounting and Reporting Solution (PEARS) continued

Phase 1 Phase 2

Oct 2013 March 2014 2015 TBD

Activities Include:

- Document System Requirements & Conduct Gap Analysis
- Conceptual Design
- Data Quality Assessment
- Reports Design
- Future State Data Collection

Activities Include:

- Detailed System Design
- System Build
- System Testing
- User Acceptance Testing
- Training
- Data and Document Conversion
- Parallel Operations



Program Expenses and Savings

- PE portfolio management expenses totaled approximately \$11.7M in FY 2012-13*
- Implementation of the Strategic Plan in September 2011 resulted in a recurring annual cost savings from consultants of \$3.3M
- Two major tenets of the Strategic Plan have been co-investments and separate accounts, both resulting in significant savings of \$250M from Customized Investment Accounts and \$130M from co-investments**
- Negotiated better economics on fund investments with savings of approximately \$90M on commitments of \$4.6B
- Staff diligently reduce costs in existing partnerships through amendments or restructuring of holdings

*Includes personnel, consultant, operating, technology, and administrative expenses **As of September 30, 2013



Fiscal Year 2013-14 Plan

- Continue implementation of Strategic Plan
- Commit up to \$6B during Fiscal Year 2013-14
- Utilize both the secondary market and co-investments to restructure and rebalance the Portfolio
- Continue build out of Portfolio Management Solution
- Support the INVO Target Operating Model (TOM)
- Implement Highlighted Initiatives

